



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/532,810

04/26/2005

Kenji Kuwayama

052503

9420

38834

7590

07/03/2008

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP
1250 CONNECTICUT AVENUE, NW
SUITE 700
WASHINGTON, DC 20036

EXAMINER

BARAN, MARY C

ART UNIT

PAPER NUMBER

2857

MAIL DATE

DELIVERY MODE

07/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/532,810	Applicant(s) KUWAYAMA ET AL.	
	Examiner MARY C. BARAN	Art Unit 2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The action is responsive to the Amendment filed on 18 March 2008. Claims 1-20 are pending. Claim 1 is amended.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuboi et al. (U.S. 6,263,380) (hereinafter Tsuboi) in view of Teradaira (U.S. Patent No. 6,516,440).

Referring to claim 1, Tsuboi teaches a measurement electronic device system (see Tsuboi, column 6 lines 43-48) comprising:

a plurality of measurement electronic device units each having a measurement detector connected thereto and having a measuring function (see Tsuboi, column 6 lines 43-56 and Figure 1), the plural measurement electronic device units being connected in series by connectors to be capable of mutually conveying measurement data and signals (see Tsuboi, column 13 lines 58-64), and one of the plural measurement electronic device units serving as a parent device having a function of

transmitting/receiving measurement data and signals to/from an external device (see Tsuboi, column 7 lines 11-18), and

respective detectors associated with respective memories (see Tsuboi, column 10 lines 5-12), but does not teach issuing a one-time measured value save command, in response to a request from the external device, to thereby cause a plurality of data to simultaneously store in the respective memories the respective data at the time of issuance of the one-time measured value save command.

Teradaira teaches issuing a one-time measured value save command, in response to a request from the external device, to thereby cause a plurality of data to simultaneously store in the respective memories the respective data at the time of issuance of the one-time measured value save command (see Teradaira, column 6 lines 20-25, column 7 line 58 -- column 8 line 5, column 9 lines 2-6, lines 7-9 and column 10 lines 3-6).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Tsuboi to include the teachings of Teradaira because data gathered from a specific sensor and stored simultaneously would have allowed the skilled artisan to isolate data from a specific sensor to determine if the sensor is faulty and prevent faulty sensor data from being analyzed, and simultaneously storing data would have allowed the skilled artisan to synchronize the data storage for power conservation.

Referring to claim 2, Tsuboi teaches that said measurement electronic device unit as the parent device has a means for causing all said measurement device units including the own unit which are connected in series to save the measured values by the respective detectors in the memories, also in response to an externally supplied measured value save command (see Tsuboi, column 7 lines 22-30 and column 10 lines 17-27).

Referring to claim 3, Tsuboi teaches that said measurement electronic device unit as the parent device has a means for selectively changing connection of a signal line connected to the other measurement electronic device units to one of a signal line from an external device and a signal line of an internal output (see Tsuboi, column 9 lines 4-6).

Referring to claim 4, Tsuboi teaches that each of said measurement electronic device units except the parent device has a means for disconnecting mutually coupled signal lines to change connection to a signal line from an external part (see Tsuboi, column 14 lines 3-19).

Referring to claim 5, Tsuboi teaches that each of said plural measurement electronic device units includes: a storing means for storing an operation parameter (see Tsuboi, column 8 lines 55-61 and column 10 lines 5-12); and an arithmetic means for performing an arithmetic operation on the measured value saved in the memory,

based on the parameter stored in the storing means (see Tsuboi, column 11 lines 11-15).

Referring to claim 6, Tsuboi teaches that said measurement electronic device unit as the parent device further includes a sum calculating means for calculating a sum of individual operation results calculated by the arithmetic means in the measurement electronic device units designated out of said plural measurement electronic device units (see Tsuboi, column 11 lines 11-15).

Referring to claim 7, Tsuboi teaches that each of said plural measurement electronic device units (see Tsuboi, Figure 1) comprises: a main body housing the connector for mutual series connection and said respective means (see Tsuboi, column 13 lines 58-64)); and a display unit attachable/detachable to/from the main body, the display unit including: a display displaying the measured value and the parameter; and operation keys (see Tsuboi, column 8 lines 26-31), and the main body and the display unit including connectors that directly connect the main body and that allow the main body and the display unit to be electrically connected via a connecting line when the display unit is detached from the main body (see Tsuboi, Figure 1 and column 6 lines 44-48).

Referring to claim 8, Tsuboi teaches that said measurement electronic device unit as the parent device has a means for selectively changing connection of a signal

Art Unit: 2857

line connected to the other measurement electronic device units to one of a signal line from an external device and a signal line of an internal output (see Tsuboi, column 9 lines 4-6).

Referring to claim 9, Tsuboi teaches that each of said measurement electronic device units except the parent device has a means for disconnecting mutually coupled signal lines to change connection to a signal line from an external part (see Tsuboi, column 14 lines 3-19).

Referring to claim 10, Tsuboi teaches that each of said measurement electronic device units except the parent device has a means for disconnecting mutually coupled signal lines to change connection to a signal line from an external part (see Tsuboi, column 14 lines 3-19).

Referring to claim 11, Tsuboi teaches that each of said plural measurement electronic device units includes: a storing means for storing an operation parameter (see Tsuboi, column 8 lines 55-61 and column 10 lines 5-12); and an arithmetic means for performing an arithmetic operation on the measured value saved in the memory, based on the parameter stored in the storing means (see Tsuboi, column 11 lines 11-15).

Referring to claim 12, Tsuboi teaches that each of said plural measurement electronic device units includes: a storing means for storing an operation parameter (see Tsuboi, column 8 lines 55-61 and column 10 lines 5-12); and an arithmetic means for performing an arithmetic operation on the measured value saved in the memory, based on the parameter stored in the storing means (see Tsuboi, column 11 lines 11-15).

Referring to claim 13, Tsuboi teaches that each of said plural measurement electronic device units includes: a storing means for storing an operation parameter (see Tsuboi, column 8 lines 55-61 and column 10 lines 5-12); and an arithmetic means for performing an arithmetic operation on the measured value saved in the memory, based on the parameter stored in the storing means (see Tsuboi, column 11 lines 11-15).

Referring to claim 14, Tsuboi teaches that said measurement electronic device unit as the parent device further includes a sum calculating means for calculating a sum of individual operation results calculated by the arithmetic means in the measurement electronic device units designated out of said plural measurement electronic device units (see Tsuboi, column 11 lines 11-15).

Referring to claim 15, Tsuboi teaches that said measurement electronic device unit as the parent device further includes a sum calculating means for calculating a sum

of individual operation results calculated by the arithmetic means in the measurement electronic device units designated out of said plural measurement electronic device units (see Tsuboi, column 11 lines 11-15).

Referring to claim 16, Tsuboi teaches that said measurement electronic device unit as the parent device further includes a sum calculating means for calculating a sum of individual operation results calculated by the arithmetic means in the measurement electronic device units designated out of said plural measurement electronic device units (see Tsuboi, column 11 lines 11-15).

Referring to claim 17, Tsuboi teaches that each of said plural measurement electronic device units (see Tsuboi, Figure 1) comprises: a main body housing the connector for mutual series connection and said respective means (see Tsuboi, column 13 lines 58-64)); and a display unit attachable/detachable to/from the main body, the display unit including: a display displaying the measured value and the parameter; and operation keys (see Tsuboi, column 8 lines 26-31), and the main body and the display unit including connectors that directly connect the main body and that allow the main body and the display unit to be electrically connected via a connecting line when the display unit is detached from the main body (see Tsuboi, Figure 1 and column 6 lines 44-48).

Referring to claim 18, Tsuboi teaches that each of said plural measurement electronic device units (see Tsuboi, Figure 1) comprises: a main body housing the connector for mutual series connection and said respective means (see Tsuboi, column 13 lines 58-64)); and a display unit attachable/detachable to/from the main body, the display unit including: a display displaying the measured value and the parameter; and operation keys (see Tsuboi, column 8 lines 26-31), and the main body and the display unit including connectors that directly connect the main body and that allow the main body and the display unit to be electrically connected via a connecting line when the display unit is detached from the main body (see Tsuboi, Figure 1 and column 6 lines 44-48).

Referring to claim 19, Tsuboi teaches that each of said plural measurement electronic device units (see Tsuboi, Figure 1) comprises: a main body housing the connector for mutual series connection and said respective means (see Tsuboi, column 13 lines 58-64)); and a display unit attachable/detachable to/from the main body, the display unit including: a display displaying the measured value and the parameter; and operation keys (see Tsuboi, column 8 lines 26-31), and the main body and the display unit including connectors that directly connect the main body and that allow the main body and the display unit to be electrically connected via a connecting line when the display unit is detached from the main body (see Tsuboi, Figure 1 and column 6 lines 44-48).

Referring to claim 20, Tsuboi teaches that each of said plural measurement electronic device units (see Tsuboi, Figure 1) comprises: a main body housing the connector for mutual series connection and said respective means (see Tsuboi, column 13 lines 58-64)); and a display unit attachable/detachable to/from the main body, the display unit including: a display displaying the measured value and the parameter; and operation keys (see Tsuboi, column 8 lines 26-31), and the main body and the display unit including connectors that directly connect the main body and that allow the main body and the display unit to be electrically connected via a connecting line when the display unit is detached from the main body (see Tsuboi, Figure 1 and column 6 lines 44-48).

Response to Arguments

3. Applicant's arguments filed 18 March 2008 have been fully considered but they are not persuasive.

Applicant argues that Teradaira does not teach "issuing a one-time measured value save command to said plural measurement electronic device units including the own unit, in response to a request from the external device, to thereby cause said plural measurement electronic device units to simultaneously store in the respective memories the values measured by the respective detectors at the time of issuance of the one-time measured value save command." However, Applicant's arguments are not well taken. Teradaira teaches memory, both EEPROM and RAM which is broken into 6 separate areas, where each area stores a specific type of data (see Teradaira, column 7 line 58 -

column 8 line 5). The data is stored using trigger events and these trigger events may cause updates (i.e. data storage) to a plurality of areas, based on the single trigger event (see Teradaira, column 9 lines 2-6, lines 7-9 and column 10 lines 3-6). The trigger events are generally time intervals which are timed using a timer or clock (i.e. external device) (see Teradaira, column 6 lines 20-25). In other words, an external device (i.e. timer or clock) times a particular interval, and when the time is reached, the specific data is sent to the respective memory block within the memory. Therefore, Teradaira teaches issuing a one-time measured value save command, in response to a request from the external device, to thereby cause a plurality of data to simultaneously store in the respective memories the respective data at the time of issuance of the one-time measured value save command (see Teradaira, column 6 lines 20-25, column 7 line 58 -- column 8 line 5, column 9 lines 2-6, lines 7-9 and column 10 lines 3-6).

Teradaira does not teach respective detectors associated with respective memories. However, this limitation is met by Tsuboi. Tsuboi teaches master/slave relaying units each having their own memory for storing detected data (see Tsuboi, column 10 lines 5-12). It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Tsuboi to include the teachings of Teradaira because data gathered from a specific sensor and stored simultaneously would have allowed the skilled artisan to isolate data from a specific sensor to determine if the sensor is faulty and prevent faulty sensor data from being analyzed, and simultaneously storing data would have allowed the skilled artisan to synchronize the data storage for power conservation.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARY C. BARAN whose telephone number is (571)272-2211. The examiner can normally be reached on Monday to Friday 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on (571) 272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mary Catherine Baran/
24 June 2008

/Eliseo Ramos-Feliciano/
Supervisory Patent Examiner, Art Unit 2857